PND5

DOES SPECIALTY CARE OF SPINA BIFIDA PATIENTS INFLUENCE COST OF CARE?

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OBJECTIVES: One of the concerns regarding care for adults with spina bifida is the high cost of treating secondary conditions, many of which are considered preventable. To determine if specialty care for spina bifida may act to contain costs by reducing, through prevention, the frequency and severity of costly secondary conditions. **METHODS:** We obtained retrospective claims data from the Washington State Department of Social and Health Services Health and Recovery Services Administration (HRSA). Fee-for-service claims data on all services, and eligibility records were obtained for Medicaid recipients of any age diagnosed with spina bifida (ICD9 code of 741.xx), between July 1, 2000 and December 31, 2004. Using multiple regression, we examined the relationship between log health-related charges (hospital, pharmaceuticals, dental care, and other medical) and demographic variables (race, sex, age, and urban vs. rural residence), number of months enrolled in the Medicaid program, the Charlson comorbidity index, and contact with clinics specializing in the care of spina bifida patients (N = 364). **RESULTS:** Comorbidity was the strongest predictor of health charges. Our results also suggest that, controlling for other factors, contact with clinics specializing in spina bifida care had no significant impact on combined charges ($F(2356) = 2.26$, p = n.s). However, there is a positive simple correlation between log total charges and being seen in an adult spina bifida specialty clinic. The relationship persists when comorbidities and demographic variables are considered. **CONCLUSION:** Specialty care for Spina Bifida may not offer a significant advantage to patients or payors. The correlation between log total charges and adult specialty care may indicate that specialty care is more expensive. Although our analysis controlled for patient severity, this finding could also reflect a migration of more costly and troublesome cases to specialty clinics.

PND6

COST-EFFECTIVENESS OF SCREENING FOR COGNITIVE IMPAIRMENT IN OLDER POPULATIONS: IMPLICATIONS FOR ALZHEIMER'S DISEASE CARE

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OBJECTIVES: We investigated the cost-effectiveness of screening for cognitive impairment in older populations, focusing on consequences for Alzheimer's disease (AD) management. We also examined how cost-effectiveness varies with assumptions about the age of individuals screened, and with the effectiveness and costs of screening, diagnosis and treatment. **METHODS:** We developed a decision-analytic model to examine the incremental cost-effectiveness of one-time screening compared to no screening in different age groups. We assumed that all screened individuals would receive a rapid mental exam, followed by a complete medical work-up including diagnostic imaging if AD was suspected. We assumed that patients identified as having AD receive a cholinesterase inhibitor if they had mild or moderate AD, and that patients with moderate AD also receive memantine. Health effects are presented in terms of quality-adjusted life years (QALYs) gained. Future costs and QALYs are discounted at 3 percent annually. Costs are expressed in US $2004. Parameter estimates are based on publicly available data. Key assumptions and estimates are tested in sensitivity analyses. **RESULTS:** The model estimates that the cost-effectiveness of screening all 80 year olds is approximately $63,000/QALY. Cost-effectiveness is sensitive to the age of the population screened, ranging from $490,000/QALY if done in 65 year olds to $48,000/QALY for 85 year olds. Results are also sensitive to assumptions about the costs and effects of AD medications and costs and accuracy of screening and diagnosis. **CONCLUSION:** Given currently available technology, population-wide screening for cognitive impairment for all Americans aged 80 and older could represent reasonable value for money, though there is uncertainty about the accuracy and cost of screening and follow up treatment. Policy makers should revisit the issue as diagnostic and management techniques advance, because improvements will make widespread screening in younger old populations more attractive from an economic standpoint.

PND7

PHARMACOECONOMIC ANALYSIS OF ANTIEPILEPTIC DRUGS IN THE TREATMENT OF THE IDIOPATHIC GENERALIZED EPILEPSIES

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OBJECTIVES: To make a pharmacoeconomic assessment of the antiepileptic drugs valproate, lamotrigine and topiramate in idiopathic generalized epilepsy treatment in Russia. **METHODS:** The pharmacoeconomic assessment was based on the results of a retrospective clinical study "The relationship between treatment with valproate, lamotrigine and topiramate and the prognosis of the idiopathic generalized epilepsies" (A. Nicolson, R.E. Appleton, D.W. Chadwick and D.F. Smith—J. Neurol. Neurosurg. Psychiatry 2004;75;75–79). 731 of those patients covered by the study underwent monotherapy with one of the anticonvulsants valproate, lamotrigine and topiramate. 52.1 percent of those patients treated with valproate achieved remission. The same figures for topiramate and lamotrigine at 34.6 and 16.7 percent, respectively. **RESULTS:** The study assessed the direct medical costs of antiepileptic therapy. The analysis was based on the price of the original drugs, Depakine, Lamictale and Topamax. The average daily dose was 1286 mg for valproate, 324 mg for lamotrigine and 256 mg for topiramate. Annual therapy costs per patient were calculated for each drug. Thus, for Depakine, Lamictale and Topamax these were 18,776, 53,217 and 94,374 rubles (1 USD = 26.5 RUR), respectively. The following results were obtained while calculating the cost-effectiveness (CE) coefficient: 36,037.62 for Depakine, 318,664.67 for Lamictale and 272,758.38 for Topamax. Valproate (Depakine) as compared with lamotrigine (Lamictale) and topiramate (Topamax) was shown to have the lowest CE coefficient. **CONCLUSION:** Valproate may be the most effective antiepileptic drug in anti-IGE monotherapy in pharmacoeconomic terms. The use of valproate as the first-choice drug helps achieve a possible economic gain of 1,003,889 rubles annually for a group of 100 patients increasing cost-effectiveness almost two times.